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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/037,959	12/21/2001	Andrew Mark Player	applied 105	7490

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EXAMINER	
ABRAHAM, ESAW T	

ART UNIT	PAPER NUMBER
2133	

DATE MAILED: 12/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/037,959	PLAYER ET AL.	
	Examiner	Art Unit	
	Esaw T Abraham	2133	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-22 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-22 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Final rejection

Response to the applicant's amendments

**********Applicants argument with respect to original claims 1-22 filled in 06/29/04 have been fully considered but they are not persuasive.

*********The objection of record to the abstract is withdrawn in response to applicant's amendement.

Response to the applicant's argument

Applicants' argument to claims 1 and 12 have been fully considered, but are not deemed persuasive.

In response to claims 1 and 12, applicant's, on page 9 of the remarks argues that the prior art of record does not teach the use of FEC bytes to correct errors and the generation of error signals responsive to the detected errors. Examiner disagrees as applicant's concedes because in figure 13 the prior art Yamazaki et al. teaches or shows correspondences between results of the detection of the mismatch (errors) and the switching operations of the FEC state of the receiver and further the FEC function of the receiver is validated when the FEC function is validated in both the transmitter and the receiver and if there is a mismatch (an error) of the FEC state between the transmitter and the receiver, an alarm is generated indicating the mismatch (see page 8, lines 29-37). Therefore, the applicants' argument although acknowledged, has not been found to be convincing.

To the extent that the response to the applicant's argument may have mentioned new portions of the prior art's reference which were not used in the prior office action, this does not constitute a new ground of rejection. It is clear that the prior art reference is of record and has

been considered by applicant. See In re Boyer, 363 F.2d 455, 458 n.2, 150 USPQ 441, 444, n.2 (CCPA 1996) and In re Bush, 296 F.2d 491, 496, 131 USPQ 263, 267 (CCPA 1961).

The mere fact that additional portions of the same reference may have been mentioned or relied upon does not constitute new ground of rejection. In re Meinhardt, 392, F.2d 273, 280, 157 USPQ 270 275 (CCPA 1968).

Examiner thus maintains that claims 1 and12 are unpatentable over the prior art of record.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

DETAILED ACTION

1. Claims **1-22** are remained for examination.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

2. Claims **1-22** are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamazaki et al. (U.S. PN: 6,487,686).

As per claims **1 and 12,** Yamazaki et al. teach or disclose in figure 3 a system comprising a transmission apparatus (58) adds FEC check bits (51) and performs calculations (53) and a receiver (59) corrects errors of received signal, an error counter (56) counts a number of the corrected errors and further the receiver checks bytes (55) and determines an error rate of the channel (57) that conforms an improvement of the error rate of the transmission (see col. 2, lines 15-26). Further, Yamazaki et al. teach that the receiver (59) evaluates the error rate achieved by the FEC checking B2 parity to correct the errors and further an error detector (5) detects a main signal error (see col. 2, lines 27-35 and col. 7, lines 17-30). Furthermore, Yamazaki et al. teach that the receiver (59) may generate an alarm so as to notify a system manager of the occurrence of a mismatch to call the attention (see col. 7, lines 45-57). **However,** Yamazaki et al. **do not explicitly teach** the system is connected to G.709 standard, Yamazaki et al. teach an optical

transmission systems such as SONET (ANSI standard) and SDH (ITU-T recommendation) in relation to error correcting functions (see col. 1, lines 54-67 and col. 2, lines 1-14) which the G.709 specification is also known to the SDH (ITU-T recommendations). **Therefore,** it would have been obvious to a person having an ordinary skill in the art at the time the invention was made to include the G.709 specification in the system of Yamazaki et al. **This modification** would have been obvious because a person having ordinary skill in the art would have been motivated in order to employ a protocol or a specification (G.709) since the protocol is conventional and well known to the SDH (ITU-T recommendations).

As per claims **2 and 4,** Yamazaki et al. teach all the subject matter claimed in claim 1 including Yamazaki et al. teach that B1 byte indicates BIP-8 and used for detecting a transmission error (see col. 1, lines 31-46). Further, Yamazaki et al. teach a pseudo (random error detection) error step of inserting a pseudo error in a check bit of the frame in a transmitter wherein the inserting part inserts information on a state of validation or invalidation of an error correcting function (see col. 3, lines 6-29). Furthermore, Yamazaki et al. teach that the receiver (59) may generate an alarm so as to notify a system manager of the occurrence of a mismatch to call the attention (see col. 7, lines 45-57). Yamazaki et al. **do not explicitly teach** the detected error includes a signal degrade (SD). **However,** a signal degrade (SD) is known art and common practice or function of the BIP-8 (transmission error detection). **Therefore,** it would have been obvious to a person having an ordinary skill in the art at the time the invention was made to generate a signal degrade signal in response to errors. **This modification** would have been obvious because a person having ordinary skill in the art would have been motivated to do so

because generating a signal degrade (SD) is well known features of BIP-8 (transmission error detection).

As per claims **3 and 5,** Yamazaki et al. teach all the subject matter claimed in claim 1 including Yamazaki et al. teach that B1 byte indicates BIP-8 and used for detecting a transmission error (see col. 1, lines 31-46). Further, Yamazaki et al. teach a pseudo (random error detection) error step of inserting a pseudo error in a check bit of the frame in a transmitter wherein the inserting part inserts information on a state of validation or invalidation of an error correcting function (see col. 3, lines 6-29). Furthermore, Yamazaki et al. teach that the receiver (59) may generate an alarm so as to notify a system manager of the occurrence of a mismatch to call the attention (see col. 7, lines 45-57). Yamazaki et al. **do not explicitly teach** detected error includes generating a signal fail (SF). **However,** a signal fail (SF) are known art and common practice or function of the BIP-8 (transmission error detection). **Therefore,** it would have been obvious to a person having an ordinary skill in the art at the time the invention was made to generate a signal degrade signal in response to errors. **This modification** would have been obvious because a person having ordinary skill in the art would have been motivated to do so because generating a signal degrade (SF) is well known features of BIP-8 (transmission error detection).

As per claim **6 and 7,** Yamazaki et al. teach all the subject matter claimed in claim 1 including Yamazaki et al. in figure 8 element 15 (Pulse generator) generates a timing signal which indicates a timing at which the pseudo error is to be generated and the decoding part (17) decodes the error position selecting signal in response to the timing generated by the pulse generator (see col. 6, lines 1-13).

As per claims **8-11,** Yamazaki et al. teach all the subject matter claimed in claim 1 including Yamazaki et al. teach that the receiver (59) may generate an alarm so as to notify a system manager of the occurrence of a mismatch to call the attention (see col. 7, lines 45-57). Yamazaki et al. teach in figure 13 teach correspondences between results of the detection of the mismatch and the switching operations of the FEC state of the receiver and as the FEC function of the receiver is validated only when the FEC function is validated in both the transmitter and the receive and further if there is a mismatch of the FEC state between the transmitter and the receiver, an alarm is generated indicating the mismatch (see col. 8, lines 29-37).

As per claims **13 and 15,** Yamazaki et al. teach all the subject matter claimed in claim 12 including Yamazaki et al. teach that B1 byte indicates BIP-8 and used for detecting a transmission error (see col. 1, lines 31-46). Further, Yamazaki et al. teach a pseudo (random error detection) error step of inserting a pseudo error in a check bit of the frame in a transmitter wherein the inserting part inserts information on a state of validation or invalidation of an error correcting function (see col. 3, lines 6-29). Furthermore, Yamazaki et al. teach that the receiver (59) may generate an alarm so as to notify a system manager of the occurrence of a mismatch to call the attention (see col. 7, lines 45-57). Yamazaki et al. **do not explicitly teach** the detected error includes a signal degrade (SD). **However,** a signal degrade (SD) is known art and common practice or function of the BIP-8 (transmission error detection). **Therefore,** it would have been obvious to a person having an ordinary skill in the art at the time the invention was made to generate a signal degrade signal in response to errors. **This modification** would have been obvious because a person having ordinary skill in the art would have been motivated to do so

because generating a signal degrade (SD) is well known features of BIP-8 (transmission error detection).

As per claims **14 and 16,** and Yamazaki et al. teach all the subject matter claimed in claim 12 including Yamazaki et al. teach that B1 byte indicates BIP-8 and used for detecting a transmission error (see col. 1, lines 31-46). Further, Yamazaki et al. teach a pseudo (random error detection) error step of inserting a pseudo error in a check bit of the frame in a transmitter wherein the inserting part inserts information on a state of validation or invalidation of an error correcting function (see col. 3, lines 6-29). Furthermore, Yamazaki et al. teach that the receiver (59) may generate an alarm so as to notify a system manager of the occurrence of a mismatch to call the attention (see col. 7, lines 45-57). Yamazaki et al. **do not explicitly teach** detected error includes generating a signal fail (SF). **However,** a signal fail (SF) are known art and common practice or function of the BIP-8 (transmission error detection). **Therefore,** it would have been obvious to a person having an ordinary skill in the art at the time the invention was made to generate a signal degrade signal in response to errors. **This modification** would have been obvious because a person having ordinary skill in the art would have been motivated to do so because generating a signal degrade (SF) is well known features of BIP-8 (transmission error detection).

As per claims 17 **and 18,** Yamazaki et al. teach all the subject matter claimed in claim 12 including Yamazaki et al. in figure 8 element 15 (Pulse generator) generates a timing signal which indicates a timing at which the pseudo error is to be generated and the decoding part (17) decodes the error position selecting signal in response to the timing generated by the pulse generator (see col. 6, lines 1-13).

As per claims **19-22,** Yamazaki et al. teach all the subject matter claimed in claims 12 including Yamazaki et al. teach that the receiver (59) may generate an alarm so as to notify a system manager of the occurrence of a mismatch to call the attention (see col. 7, lines 45-57). Yamazaki et al. teach in figure 13 teach correspondences between results of the detection of the mismatch and the switching operations of the FEC state of the receiver and as the FEC function of the receiver is validated only when the FEC function is validated in both the transmitter and the receive and further if there is a mismatch of the FEC state between the transmitter and the receiver, an alarm is generated indicating the mismatch (see col. 8, lines 29-37).

Conclusion

3. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Esaw Abraham whose telephone number is (703) 305-7743. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are successful, the examiner's supervisor, Albert DeCady can be reached on (703) 305-9595. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Esaw Abraham

Esaw Abraham

Art unit: 2133

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